



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/934,888	08/22/2001	Riho Takemoto	JP920000262US1	8155
25299	7590	12/06/2005	EXAMINER	
IBM CORPORATION PO BOX 12195 DEPT YXSA, BLDG 002 RESEARCH TRIANGLE PARK, NC 27709			PENDLETON, BRIAN T	
			ART UNIT	PAPER NUMBER
			2644	

DATE MAILED: 12/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/934,888

Applicant(s)

TAKEMOTO ET AL.

Examiner

Brian T. Pendleton

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5 and 6 is/are allowed.
- 6) ☒ Claim(s) 1-4, 7, 10-14 and 16 is/are rejected.
- 7) ☒ Claim(s) 8, 9, 15 and 17-20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-4 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Objections***

Claim 12 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Parent claim 10 recites that the mute canceling logic cancels the muting after the set value of the muted audio volume is changed, while claim 12 states that the set value of the mute audio volume is not changed.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Phu et al, US Patent 6,321,278. Phu et al disclose a computer system comprising built-in loudspeaker 112, line-out jack 500, headphone jack 405, and audio switch 220 in figure 5. As taught in column 6

Art Unit: 2644

lines 35-60, when a headphone 106 is connected to the headphone jack 405, the internal (built-in) speaker 112 is disconnected from the sound device 116 via the audio switch 220. Headphone jack 405 recognizes an external connection situation and audio switch 220 is an audio volume setting logic whereby the volume is on or off. The different external connection situations are headphones connected and headphones not connected. Claim 1 is met. As to claims 2-4, the external connection is a peripheral apparatus connection situation.

Claim 7 is rejected under 35 U.S.C. 102(e) as being anticipated by Merriam, US Patent 6,408,187. Merriam discloses a method of volume control based on the environment conditions of a communications device 100. The communications device 100 (which is read broadly as a computer apparatus since it has a processor 104) comprises a plurality of sensors 112 and memory 106. As shown in figure 2, the communications device activates an audio alert (through an inherent built-in speaker) based on the outputs of the sensors. Column 7 lines 6-24 discloses that the volume of the audio alert is based on the environment (different places) in which the communications device is located. Behavior determining data unit 110 acts as an audio volume control logic and behavior determining instruction unit 108 acts as a storage unit.

Claims 10, 11, 14, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Iwata et al, US Patent 5,355,531. Iwata et al disclose a squelch circuit for a radio transmitter/receiver comprising variable resistor 6, A/D converter 7, volume controller 8, digitally controlled electronic volume control 5, amplifier 4, memory 10, and timer 9. The radio transmitter/receiver qualifies as an audio apparatus or computer apparatus (since it has digital computing elements) and has a speaker 3 which is inherently built-in. As disclosed in column 2 line 49 – column 3 line 25, squelch signal 2 is part of a muting logic for muting the audio volume

Art Unit: 2644

of output. Variable resistor 6 is part of the muting logic for changing a set value of the muted audio volume during muting. As specifically taught in column 3 lines 3-11, when the volume value via variable resistor 9 is changed from the pre-mute value which is stored in memory 10 the changed volume value is set in the digitally controlled electronic volume control 5. Column 4 lines 31-34 state that when volume adjustment is finished the received audio signal 1 restores a mute state, thereby indicating that the mute is canceled after the volume adjustment. Claims 10, 11 and 14 are met. As to claim 16, use of the variable resistor 6 meets the claim language.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata. Iwata does not explicitly state a third mute canceling logic for canceling muting without changing the set value of the muted audio volume. Examiner takes Official Notice that the technique and benefit of canceling a muting operation by not changing the set value of an audio source was well known at the time of invention. It would have been obvious to one of ordinary skill in the art at the time of invention to employ such a technique for the purpose of reproducing the audio at the level last played thereby maintaining the consistency of the audio experience. As to claim 13, it was notoriously well known to display the set value of an audio volume during muting.

***Allowable Subject Matter***

Claims 5 and 6 are allowed.

Claims 8, 9, 15 and 17-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### *Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian T. Pendleton whose telephone number is (571) 272-7527. The examiner can normally be reached on M-F 7-4:30.

Art Unit: 2644

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571) 272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian T. Pendleton  
Primary Examiner  
Art Unit 2644



btp